move from the point B, continually till it come to L, the Arch QF will first increase and then decrease, and so will the Angle AXR which the rays AN and GR contain; and the Arch QF and Angle AXR will be biggest when ND is to CN as $\sqrt{11\text{-}RR}$ to $\sqrt{3}$ RR, in which case NE will be to ND as 2 R to I. Also the Angle AYS which the rays AN and HS contain will first decrease, and then increase and grow least when ND is to CN as $\sqrt{11\text{-}RR}$ to $\sqrt{8}$ RR, in which case NE will be to ND as 3 R to I. And so the Angle which the next emergent ray (that is, the emergent ray after three reflexions) contains with the incident ray AN will come to its limit when ND is to CN as $\sqrt{11\text{-}RR}$ to $\sqrt{15}$ RR, in which case NE will be to ND as 4 R to I, and the Angle which the ray next after that emergent, that is, the ray emergent after four reflexions, contains with the incident will come to its limit, when ND is to CN as $\sqrt{11\text{-}RR}$ to $\sqrt{24}$ RR, in which case NE will be to ND as 5 R to I; and so on infinitely, the numbers 3, 8, 15, 24, &c. being gathered by continual addition of the terms of the arithmetical progression 3, 5, 7, 9, &c. The truth of all this Mathematicians will easily examine.

Now it is to be observed, that as when the Sun comes to his Tropicks, days increase and decrease but a very little for a great while together; so when by increasing the distance CD, these Angles come to their limits, they vary their quantity but very little for some time together, and therefore a far greater number of the rays which fall upon all the points N in the Quadrant BL, shall emerge in the limits of these Angles, then in any other inclinations. And further it is

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